What is claimed is:

1. A document structure inspection method comprising the step of:

5   applying a document structure alteration rule, which is stored by storage means, to a first document structure definition expressing the structure of a structured document written in a document structure definition language for the purpose of effecting conversion to generate a second document

10 structure definition;

wherein said document structure alteration rule includes a replacement rule for setting a document structure definition element name that is to be replaced in accordance with an element name contained in a document structure

15 definition targeted for application and an addition rule for setting a document structure definition element name that is to be added in accordance with the end of an element name contained in a document structure definition targeted for application, wherein said conversion creates said second

20 document structure definition by replacing a specified element with an element set in a document structure definition stored in said storage means when an element name targeted for application, which is set in said replacement rule, appears in said first document structure definition, and by adding a

set document structure definition element, which is stored in said storage means, to a location after a specified element when an element name targeted for application, which is set in said addition rule, appears in said first document structure

5 definition; and

conducting an inspection on an individual element name basis to determine whether said second document structure definition is consistent with a corresponding document structure definition stored in said storage means.

10 2. The document structure inspection method according to claim 1, wherein said replacement rule is applied to an element of said first document structure definition corresponding to an encrypted portion of said structured document for the purpose of effecting conversion to generate

15 a corresponding document structure definition element.

3. The document structure inspection method according to claim 1, wherein a document structure definition element added by applying said addition rule is an element that corresponds to a digital signature affixed to said structured

20 document.

4. The document structure inspection method according to claim 1, wherein said first document structure definition corresponds to the structure definition of an electronically signed document, and wherein a document structure definition

element added by applying said addition rule is a structure definition element of a document targeted for a digital signature.

5. The document structure inspection method according to claim 1, in a step for said inspection, searching said document structure alteration rule if an element name appearing in said second document structure definition is inconsistent with a corresponding document structure definition element name, and if an element name appearing in said second document structure definition is consistent with said element name targeted for application of said replacement rule or said addition rule, conducting an inspection on an individual element name basis to determine whether the document structure definition for an element name appearing in said second document structure definition is consistent with the document structure definition for said element name targeted for application.

6. The document structure inspection method according to claim 1, wherein the name of said document structure definition has an extension indicating the type of document structure definition language in which said document structure definition is written, and wherein a step for said inspection is performed in accordance with said document structure definition language indicated by said extension.

7. A document structure inspection apparatus, comprising:

a document structure definition converter for applying a document structure alteration rule stored by storage means

5 to a first document structure definition, which expresses the structure of a structured document written in a document structure definition language, for the purpose of effecting conversion to generate a second document structure definition; and

10 a document structure inspection unit for conducting an inspection on an individual element name basis to determine whether said second document structure definition is consistent with a corresponding document structure definition stored in said storage means;

15 wherein said document structure alteration rule includes a replacement rule, which sets a document structure definition element name that is to be replaced in accordance with an element name contained in a document structure definition targeted for application, and an addition rule,

20 which sets a document structure definition element name that is to be added in accordance with the end of an element name contained in a document structure definition targeted for application; and

wherein said document structure definition converter comprises means for replacing a specified element by an element set in a document structure definition stored in said storage means when an element name targeted for application, which is

5   set in said replacement rule, appears in said first document structure definition, and means for adding a set document structure definition element stored in said storage means to a location after a specified element when an element name targeted for application, which is set in said addition rule,

10   appears in said first document structure definition.

       8. The document structure inspection apparatus according to claim 7, wherein said document structure definition converter applies said replacement rule to an element of said first document structure definition, which

15   corresponds to an encrypted portion of said structured document, in order to effect conversion to generate a corresponding document structure definition element.

       9. The document structure inspection apparatus according to claim 7, wherein a document structure definition

20   element added by applying said addition rule is an element that corresponds to a digital signature affixed to said structured document.

       10. The document structure inspection apparatus according to claim 7, wherein said first document structure

definition corresponds to the structure definition of an electronically signed document, and wherein a document structure definition element added by applying said addition rule is a structure definition element of a document targeted

5 for a digital signature.

11. The document structure inspection apparatus according to claim 7, wherein said document structure inspection unit comprises means for conducting a search on said document structure alteration rule if an element name

10 appearing in said second document structure definition is inconsistent with a corresponding document structure definition element name, and means for conducting an inspection on an individual element name basis, if an element name appearing in said second document structure definition

15 is consistent with said element name targeted for application of said replacement rule or said addition rule, to determine whether the document structure definition for an element name appearing in said second document structure definition is consistent with the document structure definition for said

20 element name targeted for application.

12. The document structure inspection apparatus according to claim 7, wherein the name of said document structure definition has an extension indicating the type of document structure definition language in which said document

structure definition is written, and wherein said document structure inspection unit conducts an inspection in accordance with said document structure definition language indicated by said extension.

5   13. A program for causing a computer to implement a conversion function for applying a document structure alteration rule stored by storage means to a first document structure definition, which expresses the structure of a structured document written in a document structure definition

10   language, for the purpose of effecting conversion to generate a second document structure definition, and an inspection function for conducting an inspection on an individual element name basis to determine whether said second document structure definition is consistent with a corresponding document

15   structure definition stored in said storage means;

      wherein said document structure alteration rule includes a replacement rule, which sets a document structure definition element name that is to be replaced in accordance with an element name contained in a document structure

20   definition targeted for application, and an addition rule, which sets a document structure definition element name that is to be added in accordance with the end of an element name contained in a document structure definition targeted for application; and

wherein said conversion function includes a function for replacing a specified element by an element set in a document structure definition stored in said storage means when an element name targeted for application, which is set

5　in said replacement rule, appears in said first document structure definition, and a function for adding a set document structure definition element stored in said storage means to a location after a specified element when an element name targeted for application, which is set in said addition rule,

10　appears in said first document structure definition.

14. The program according to claim 13, wherein said inspection function includes a function for conducting a search on said document structure alteration rule if an element name appearing in said second document structure definition

15　is inconsistent with a corresponding document structure definition element name, and a function for conducting an inspection on an individual element name basis, if an element name appearing in said second document structure definition is consistent with said element name targeted for application

20　of said replacement rule or said addition rule, to determine whether the document structure definition for an element name appearing in said second document structure definition is consistent with the document structure definition for said element name targeted for application.